

The automated sampler experienced significant technical difficulties during the sampling effort. The area was quite cool and shaded and, as a result, the sampler batteries died very quickly. Few samples were ever collected with the device. The single-stage samplers proved more reliable however, and they captured runoff from several storms.

Results from storms from Sept. and Dec. (Figures A.4 through A.7) show how high the turbidities can get within the basin and at the outlet, with initial values ranging from 500 to almost 3,500 NTU! In the graphs below, the ‘in’ samples were those collected from the forebay, while the ‘out’ or ‘exit’ samples were those collected at the spillway, or exit, of main basin. The ‘lower’/‘bottom’, ‘middle’, and ‘upper’ designations refer to the bottles placement position on the post itself, thus they give us a snapshot of the turbidities present in the basin over the duration of the storm as the basin filled up with runoff. The summary graph for all six storms captured (Figure A.7) reveals a general pattern within the sediment trap. While the forebay often reduces turbidity somewhat from the very high initial values, the main basin does not appear to reduce the turbidity any further, in fact revealing consistent increases. However, the trap was effective in capturing sediment and in reducing the loading rates discharged out of the trap, it is only with regards to turbidity that it appears to have little important treatment effect.

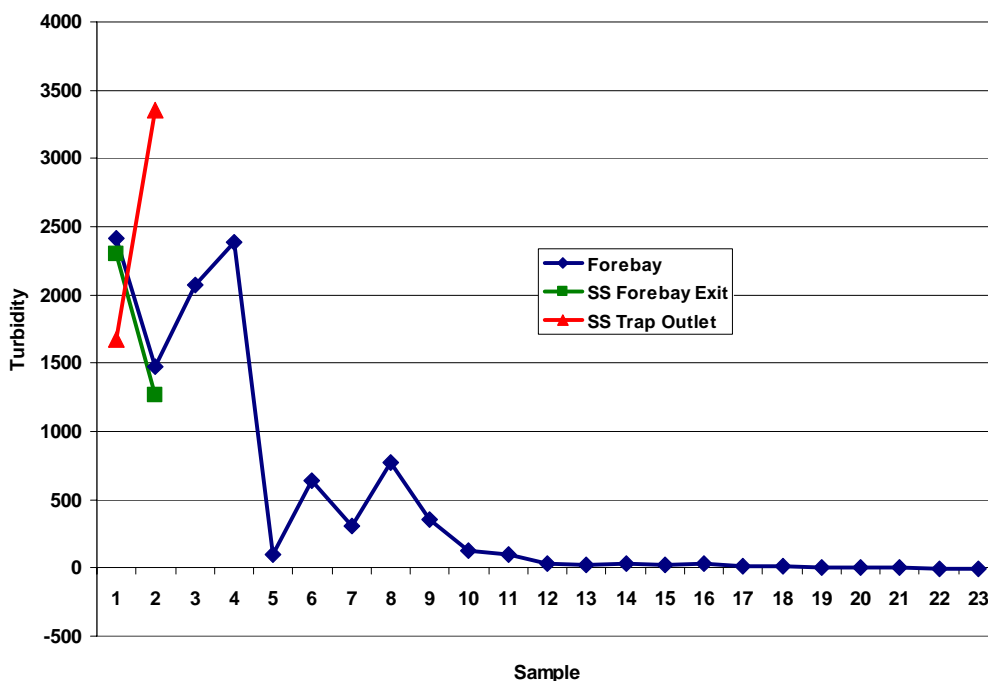


Figure A.4. Benge Ashe Storm Turbidity for 9/20/2004